

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE 4949-A Cox Road, Glen Allen, Virginia 23060 (804) 527-5020 www.deq.virginia.gov

Matthew J. Strickler Secretary of Natural Resources David K. Paylor Director (804) 698-4000

James J. Golden Regional Director

November 30, 2020

Mr. Rolf Lindenhayn Environmental Specialist III 120 Tredegar Street, 3rd Floor 3.251 Richmond, VA 23219

Location: Richmond County

Registration No.: 40198

Dear Mr. Lindenhayn:

Attached is a minor modification to the Title V permit to operate the Dominion-Northern Neck CT Station pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning November 30, 2020.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on September 29, 2020.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to operate shall not relieve Dominion-Northern Neck CT Station of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director Department of Environmental Quality P. O. Box 1105 Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the regional office at (804) 527-5020.

Sincerely,

Kyle Ivar Winter, P.E. Deputy Regional Director

ff bran Winten

KIW/lac/40198-7 Dominion-Northern Neck .MinorModTV

Attachment: Permit

cc: Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)

Manager/Inspector, Air Compliance (electronic file submission)



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James J. Golden Regional Director

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13. §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

Virginia Electric and Power Company Dominion - Northern Neck CT Station

Facility Name:

Route 697

Facility Location:

Warsaw, Virginia

Registration Number:

40198

Permit Number:

PRO40198

This permit includes the following programs:

Federally Enforceable Requirements – Clean Air Act (Pages 7 through 25)

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June 19, 2014
Effective Date

November 30, 2020
Modification Date

June 18, 2019¹ Expiration Date

Kyle Ivar Winter, P.E. Deputy Regional Director

November 30, 2020 Modification Signature Date

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¹Virginia Electric and Power Company submitted a timely and complete application for Dominion-Northern Neck CT Station's Title V Permit renewal. Therefore, the source is operating under an application shield according to 9 VAC 5-80-80 F 5 and 9 VAC 5-80-140.

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I. Facility Information

Permittee

Virginia Electric and Power Company 5000 Dominion Boulevard Glen Allen, Virginia 23060

Responsible Official

Mr. Mohammed Alfayyoumi Station Director Northern Neck Combustion Turbine Station (804) 380-1066

Facility

Dominion – Northern Neck CT Station Route 697 Warsaw, Virginia

Contact person

Ms. Elizabeth Gayne Manager, Environmental-Dominion Energy Corporate Air Programs (804) 273-3418

County Plant ID Number: 159-0011

Facility Description: NAICS Code Number - 221112

Northern Neck Turbine Station is an electric power generation facility. No. 2 Fuel Oil is used to fire Four (4) General Electric Model PB5221 gas turbines each rated at 338 x 10⁶ Btu per hour. One of the turbines is equipped with a diesel starter engine for blackstart capacity. The turbines were originally installed in 1971 and are used for peak power production. The facility is a Title V major source of SO2 and NOx pollutants and an area source of hazardous air pollutants (HAPs). This source is located in an attainment area for all pollutants, and is a PSD major facility. The facility was previously permitted under an Exclusionary General Permit, issued on March 12, 1998 which is superseded by the Title V permit issued on March 18, 2003. Virginia Electric and Power Company submitted a Title V permit application dated June 28, 2000 and a Title V permit was issued on March 18, 2003. The Title V permit was amended on February 13, 2006. Virginia Electric and Power Company (Dominion) submitted their renewal for a Title V permit on August 22, 2007 and the application was received by DEQ on August 28, 2007. The Title V permit was renewed on July 15, 2008 and it expired on July 15, 2013. The Title V permit was amended on December 11, 2008. Virginia Electric and Power Company submitted an application on January 10, 2013 that was received on January 15, 2013 for a renewal of the Title V permit.

II. Emission Units

Equipment to be operated consists of:

| Emission Unit ID | Stack ID | Emission Unit Description | Size/Rated Capacity* | Pollution Control Device (PCD) Description | PCD ID | Pollutant Controlled | Applicable Permit Date/ Federal Reg. |
|---------------------|------------------|--|--|--|--------|-------------------------|--|
| Fuel Burning E | quipment | | | | | | |
| ES-1 | EP-1 | Unit 1 Combustion Turbine General Electric - PB 5221 July 1971 | 338* MMBtu/hr nominal (20.7 Megawatts) | | | | None |
| ES-2 | EP-2 | Unit 2 Combustion Turbine General Electric - PB 5221 July 1971 | 338* MMBtu/hr nominal (20.7 Megawatts) | | | | None |
| ES-3 | EP-3 | Unit 3 Combustion Turbine General Electric - PB 5221 July 1971 | 338* MMBtu/hr nominal (20.7 Megawatts) | | | | None |
| ES-4 | EP-4 | Unit 4 Combustion Turbine General Electric - PB 5221 July 1971 | 338* MMBtu/hr nominal (20.7 Megawatts) | | - | | None |
| ES-5 | EP-5 | Unit 1 Blackstart Engine Industrial Application Model V785 July 1971 | 6.72 MMBtu/hr nominal (1.97 Megawatts) | | | | MACT Subpart ZZZZ |
| EG- PORTABLE | EG- PORTABLE1 | Kohler 400REZXB Propane Emergency Generator Engine | 0.35 MMBtu/hr nominal (295 kW) | | | | NSPS Subpart JJJJ MACT Subpart ZZZZ |

^{*}The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements – (ES-1, -2, -3, -4, -5 and EG-Portable)

A. Limitations

- 1. The approved fuel for the simple cycle combustion turbines (ES-1, 2, 3 & 4) is No. 2 distillate fuel oil and any alternative fuel that the turbines were capable of firing prior to January 6, 1975. The maximum sulfur content of the distillate oil to be used for the turbines shall not exceed 0.5 percent by weight. Distillate oil is defined as fuel oil that meets the specifications for Fuel Oil Numbers 1 or 2 under the American Society for Testing and Materials, ASTM 396 Standard Specification for Fuel Oils, or other approved ASTM method, incorporated in 40 CFR 60 by reference. A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-110)
- 2. The approved fuel for the blackstart engine (ES-5) is No. 2 distillate fuel oil and any alternative fuel which the engine was capable of firing prior to January 6, 1975. The maximum sulfur content of the distillate oil to be used for the engine shall not exceed 0.5 percent by weight. Distillate oil is defined as fuel oil that meets the specifications for Fuel Oil Numbers 1 or 2 under the American Society for Testing and Materials, ASTM 396 Standard Specification for Fuel Oils, or other approved ASTM method, incorporated in 40 CFR 60 by reference. A change in the fuels may require a permit to modify and operate.

 (9 VAC 5-80-110)
- 3. Short-term emission limits from the operation of each of the Four (4) General Electric Model PB 5221 simple cycle combustion turbines (ES-1, 2, 3 & 4) shall not exceed the limits specified below (except during start-up, shutdown and malfunction conditions):

| Table No. 3.1 Emissions limitations for each General Electric Model PB 5221 simple cycle combustion turbines (ES-1, 2, 3, and 4) | | | | | |
|--|---------------------------|-------------------------------|-----------------------------------|--------------------|--------------------------------------|
| Limitation/Standard | | | | | |
| Regulated Pollutant | Heat Capacity MMBtu | Emission Rate Standard | Emission Ratio Lb/MM Btu | Emissions Lb/hr | Applicable Requirement 9 VAC 5 |
| PM ₁₀ | 338 | 1.0906*(H) ^{-0.2594} | 0.168 | 56.8 | 40-900 A.1.b |
| SO ₂ | 338 | 2.64*K | NA | 892.3 | 40-930 A.1 |

(9 VAC 5-80-110, 9 VAC 5-40-900 and 9 VAC 5-40-930)

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4. Visible emissions from each of the combustion turbines (ES-1, 2, 3 & 4) exhaust stack(s) (EP-1, 2, 3 & 4) shall not exceed 20 percent opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 60 percent opacity.

(9 VAC 5-40-80 and 9 VAC 5-80-110)

Visible emissions from the blackstart engine's (ES-5) exhaust stack(s) (EP-5) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity.
 (9 VAC 5-40-80 and 9 VAC 5-80-110)

- 6. Combustion turbine (ES-1, 2, 3 & 4) emissions shall be controlled by proper operation and maintenance. Combustion turbine operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.

 (9 VAC 5-20-180 and 9 VAC 5-80-110)
- Blackstart engine (ES-5) emissions shall be controlled by proper operation and maintenance. Blackstart engine operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.
 VAC 5-20-180 and 9 VAC 5-80-110)
- 8. The permittee shall operate and maintain the blackstart engine (ES-5) such that it meets the requirements of Table 2d(4) of 40 CFR 63 Subpart ZZZZ. Alternatively, the permittee may utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Table 2d(4). If an oil analysis plan is utilized, the permittee must include the plan as part of the maintenance plan for the engine.
 - (9 VAC 5-80-110 and 40 CFR 63.6603)
- 9. The permittee must operate and maintain the blackstart engine (ES-5) and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether such operation and maintenance procedures being used are sufficient to minimize emissions will be based on available information which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
 - (9 VAC 5-80-110, 40 CFR 63.6605(b), 40 CFR 63.6640(a), and 40 CFR 63.6625(e))

- 10. The permittee shall comply with the applicable requirements of 40 CFR 63 Subpart A as shown in Table 8 of 40 CFR 63 Subpart ZZZZ.
 - (9 VAC 5-80-110 and 40 CFR 63.6665)
- 11. The permittee shall minimize the blackstart engine's (ES-5) time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
 - (9 VAC 5-80-110 and 40 CFR 63.6625(h))
- 12. The Kohler 400REZXB Propane Emergency Generator Engine (EG-Portable) shall comply with 40 CFR 63, Subpart ZZZZ by complying the applicable requirements of 40 CFR 60, Subpart JJJJ. No other requirements of this section apply. (9 VAC 5-80-110 and 40 CFR 63.6590(c))
- 13. Except where this permit is more restrictive than the applicable requirement, the Kohler Propane Emergency Generator Engine (EG-Portable) shall be operated in compliance with all applicable requirements of NSPS Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The emission unit is considered an emergency stationary internal combustion engine as defined in 40 CFR 60.4248. The requirements are as follows:

| Citation | Requirement |
|--------------------------------|------------------------------|
| 40 CFR 60.4233(d) and Table 1, | Emission Standards |
| 40 CFR 60.4234 | |
| 40 CFR 60.4237(c) | Monitoring Requirements |
| 40 CFR 60.4243 | Compliance Requirements |
| 40 CFR 60.4245(a) | Notification, Reporting, and |
| | Recordkeeping Requirements |
| 40 CFR 60.4246 and Table 3 | General Provisions |

(9VAC5-80-110 and 40 CFR 60, Subpart JJJJ)

14. Visible emissions from the Kohler 400REZXB Propane Emergency Generator Engine's (EG-Portable) exhaust stack (EG-Portable1) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity. Visible emissions shall be determined as indicated by EPA Method 9 (reference: 40 CFR Part 60, Appendix A).

(9 VAC 5-80-110 and 9 VAC 5-50-80)

B. Monitoring and Recordkeeping

1. The permittee shall test the distillate oil in the distillate oil storage tank (NN-Tank A) for sulfur content after each shipment of distillate oil. Dominion defines a shipment as a series of truck transport loads from any source or other vendor. Distillate oil sulfur content shall be determined using ASTM D2880 or another approved ASTM method incorporated in 40 CFR 60 by reference. Records of distillate oil sulfur content shall

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be available on site for inspection by DEQ personnel. These records shall be kept on file for the most current five-year period.

(9 VAC 5-40-50 and 9 VAC 5-80-110)

2. The permittee shall perform visible emissions observations (VEO's) on the exhaust stack (EP-1, 2, 3, & 4) of each General Electric Model PB 5221 simple cycle combustion turbine (ES-1, 2, 3 & 4) according to the following schedule:

Operating Schedule/History

Observation Frequency

a. < 20 hrs ' No evaluations required

b. 20 hrs / yr < hours operated < 200 hrs / yr Once per year

c. Hours operated > 200 hrs / yr Once every 200 hours

Each VEO shall be performed for a sufficient period of time to identify the presence of visible emissions. If no visible emissions are observed, no action shall be required. However, if visible emissions are observed, a visible emissions evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period of not less than 6-minutes. If the average opacity exceeds 20%, modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 minutes to determine compliance with the opacity limits specified in Condition III A.4 of this permit. The VEE observer shall be currently Method 9 certified.

(9 VAC 5-80-110 E)

3. The permittee shall perform visible emissions observations (VEOs) on the exhaust stack (EP-5) of the blackstart engine (ES-5) and on the exhaust stack (EG-Portable1) of the Kohler 400REZXB Propane Emergency Generator Engine (EG-Portable) according to the following schedule for each engine:

Operating Schedule/History

Observation Frequency

a. < 20 hrs / yr
 b. < 20 hrs / yr < hours operated < 200 hrs / yr
 Once per year

c. Hours operated > 200 hrs / yr Once every 200 hours

The presence of visible emissions for either engine shall require the permittee to:

- a. Take corrective action such that the engine resumes operation with no visible emissions, or,
- b. Conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the affected area are 20 percent opacity or less. If any of

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the 15-second observations exceeds 20 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to 20 percent opacity.

The permittee shall maintain a visual observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the engine has not been operated for any period during the six month period, it shall be noted in the log book. (9 VAC 5-80-110)

- 4. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrated compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:
 - a. The daily and annual throughput distillate oil (in 1000 gallons). The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
 - b. Distillate oil sulfur content test results (NN Tank A).
 - c. Date, time, name of emission unit, applicable visible emission and visible emission observation requirements, results of the observations, name of the observer for each visible emission and visible observation evaluation and a record of all correction actions, if taken.
 - d. A copy of each notification and report submitted to comply with 40 CFR 63 and 7.7.7.7.
 - e. Record of the reason and hours operation for the blackstart engine (ES-5).
 - f. Records of distillate oil shipments and testing as specified in Condition IV A.2 of this permit.
 - g. All records required by NSPS Subpart JJJJ.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-40-50 H, 9 VAC 5-50-50 and 9 VAC 5-80-110)

5. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the combustion turbines. The permittee shall:

a. Maintain records of all scheduled and non-scheduled maintenance performed on all process equipment that affect permitted emissions.

These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.

(9 VAC 5-80-110)

C. Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-40-30 and 9 VAC 5-80-110)

D. Reporting

The reporting requirements for this section are satisfied by the recordkeeping requirements in this section and the General Conditions section. (9 VAC 5-80-110)

IV. Facility Wide Conditions

A. Limitations

1. Short-term emission limits from the operation of the Four (4) General Electric Model PB 5221 simple cycle combustion turbines (ES-1, 2, 3 & 4) and the blackstart engine (ES-5) shall not exceed the limits specified below:

| | Table 4.1 Facility Wide Emissions Limitations | | |
|------------------------|---|-------------------------|---------------------|
| Regulated Pollutant | | | Reference Method |
| PM | 227.2 pounds per hour | 9 VAC 5-40-900 A.1.b | |
| SO ₂ | 3569.3 pounds per hour | 9 VAC 5-40-930 A.1. | |

(9 VAC 5-80-110)

- 2. Distillate Oil Shipments For each distillate oil shipment, the permittee shall obtain a copy of the manifest for each truck. Dominion defines a distillate oil shipment as a series of truck transport loads from any source within a 30-day period. The manifest shall include:
 - a. The name of the fuel supplier,
 - b. The date on which the distillate oil was received, and
 - c. The volume of distillate oil delivered.

After each shipment of distillate oil, the permittee shall:

- d. Certify that the distillate oil in the distillate oil storage tank (IS-1) complies with the ASTM specifications for fuel oil numbers 1 or 2.
- e. Calculate the total volume of distillate oil received in the shipment, and
- f. If testing is requested by the DEQ, test the distillate oil in the distillate storage tank (IS-1) for sulfur content. Distillate oil sulfur content shall be determined using ASTM D396 or other approved ASTM method incorporated in 40 CFR by reference.

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Records of oil shipments shall be maintained on-site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9VAC 5-80-110)

B. Periodic Monitoring and Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters required to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office.

(9 VAC 5-40-50 H and 9 VAC 5-80-110)

C. Reporting

1. The permittee shall record the results of any 40 CFR Part 60 method 22 opacity test evaluation as a result of Condition III.B.2. If the evaluation indicates the facility is out of compliance with the standard contained in Condition III.B.2, the source shall also report the length of time associated with any exceedance of the standard and the corrective actions taken to correct the exceedance. This report shall be sent to the Director, Piedmont Regional Office.

(9 VAC 5-20-110, 9 VAC 5-40-50 H and 9 VAC 5-80-110 E)

D. Testing

1. The permit does not require the source to test. The Department and US EPA has authority to require testing not included in this permit if necessary to determine compliance with any applicable emissions limit or standard. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate test method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

| Emission Unit No. | Emission Unit Description | Citation (9 VAC_) | Pollutant(s) Emitted (9 VAC 5-80-720 B) | Rated Capacity (9 VAC 5-80-720 C) |
|-------------------|--|-------------------|--|--------------------------------------|
| IS-1 | No. 2 Fuel Oil Tanks (NN-Tank A) | 5-80-720 B. | VOC | 1,500,000 gallons |
| IS-2 | Lube Oil system | 5-80-720 B. | VOC | 4 @ 1,700 gallons |
| IS-3 | Coolant/Glycol system | 5-80-720 B. | Ethylene Glycol CAS # 107211 | 4 @ 140 gallons |

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| II | Emission Unit Description | Citation (9 VAC) | \ | Rated Capacity (9 VAC 5-80-720 C) |
|------|---------------------------|---------------------|-----|--------------------------------------|
| IS-4 | U.S.T (fuel drains/water) | 5-80-720 B. | VOC | 550 gallon |

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements, which have been specifically identified as being not applicable to this permitted facility:

| Citation | Title of Citation | Description of Applicability |
|----------------------|--|--|
| 40 CFR 60 Subpart GG | Standards of Performance for Stationary Gas Turbines | Simple Cycle turbines at the facility were constructed prior to October 3, 1977. |
| 9 VAC 5 Chapter 140 | NOx Budget Trading Program. | Simple Cycle turbines rated at 20.7 Megawatts and were permitted prior to November 15, 1990. |
| 9 VAC 5 Chapter 50 | Virginia requirements for new & modified sources | At this time the facility has not been determined to be a new or modified source. |

| Citation | Title of Citation | Description of Applicability |
|------------------------|------------------------------|---------------------------------|
| 10 677 60 6 1 | Standards of Performance for | Simple Cycle turbines at the |
| 40 CFR 60 Subpart | Stationary Combustion | facility were constructed prior |
| KKKK | Turbines | to February 18, 2005. |
| | Standard of Performance for | Simple Cycle turbines at the |
| 40 CFR 60 Subpart IIII | * * | facility were constructed prior |
| | Ignition Internal Combustion | to July 11, 2005. |
| | Engines. | to sury 11, 2005. |
| | National Emission Standards | Subpart YYYY does not apply |
| 40 CFR 63 Subpart | for Hazardous Air Pollutants | to the simple cycle turbines at |
| YYYY | for Stationary Combustion | this facility because of |
| | Turbines | 63.6090(b)(4). |

| Citation | Title of Citation | Description of Applicability |
|----------------------|------------------------------|-----------------------------------|
| | Standards of Performance for | Petroleum storage at the facility |
| 40 CFR 60 Subpart Kb | Volatile Organic Liquid | is exempt because of the low |
| | Storage Vessels | vapor pressure. |

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

VII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until

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the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
- f. The operating conditions existing at the time of sampling or measurement. (9 VAC 5-80-110 F)
- Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

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- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
 (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

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6. Such other facts as the permit may be required to determine the compliance status of the source.

7. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic address: R3_APD_Permits@epa.gov (9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, PRO Region within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, PRO Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, PRO Region. (9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal

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application. (9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
 (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or

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installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as

may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under

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9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)

- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
 - e. In any enforcement proceeding, the permittee seeking to establish the occurrence of

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a malfunction shall have the burden of proof.

f. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to

occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

VIII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

- 1. Odor none
- 2. State toxics rule none

(9 VAC 5-80-110 N and 9 VAC 5-80-300)